

Title (en)  
CURABLE INK COMPOSITION, CURED MATERIAL AND NANOCOMPOSITE

Title (de)  
HÄRTBARE TINTENZUSAMMENSETZUNG, GEHÄRTETES MATERIAL UND NANOVERBUNDSTOFF

Title (fr)  
COMPOSITION D'ENCRE DURCISSABLE, MATÉRIAU DURCI ET NANOCOMPOSITE

Publication  
**EP 4019558 A4 20221102 (EN)**

Application  
**EP 20856778 A 20200825**

Priority  

- US 201962892630 P 20190828
- JP 2019215816 A 20191128
- JP 2020032003 W 20200825

Abstract (en)  
[origin: EP4019558A1] The objective of the invention is to provide a curable ink composition capable of forming a cured product with a high refractive index and applicable to the inkjet method, a cured product of the curable ink composition, and a nanocomposite having a film composed of the cured product of the curable ink composition. In this invention, in a curable ink composition including a photopolymerizable compound (A) and metal compound nanocrystals (B), using a sulfide compound (A1) having specific structure and a (meth)acrylate compound (A2) as the photopolymerizable compound (A), and using zirconium oxide nanocrystals as the metal compound nanocrystals (B), and accomplished the present invention.

IPC 8 full level  
**B41J 2/01** (2006.01); **C08F 20/18** (2006.01); **C08F 20/38** (2006.01); **C09D 11/38** (2014.01)

CPC (source: EP KR US)  
**B41J 2/01** (2013.01 - KR); **B41M 5/50** (2013.01 - US); **C08F 20/18** (2013.01 - KR); **C08F 20/38** (2013.01 - KR); **C08F 220/30** (2013.01 - EP); **C09D 4/00** (2013.01 - EP); **C09D 11/101** (2013.01 - EP); **C09D 11/106** (2013.01 - US); **C09D 11/322** (2013.01 - EP KR US); **C09D 11/38** (2013.01 - EP KR US); **C09D 147/00** (2013.01 - US)

Citation (search report)  

- [Y] JP 2009120832 A 20090604 - MITSUBISHI CHEM CORP
- [Y] JP 2009102550 A 20090514 - MITSUBISHI CHEM CORP
- [I] WO 2017136711 A1 20170810 - PIXELLIGENT TECH LLC [US]
- See references of WO 2021039783A1

Cited by  
EP4130073A4

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4019558 A1 20220629**; **EP 4019558 A4 20221102**; CN 114341281 A 20220412; JP 2021031669 A 20210301; KR 20220051247 A 20220426; TW 202116938 A 20210501; US 2022325127 A1 20221013; WO 2021039783 A1 20210304

DOCDB simple family (application)  
**EP 20856778 A 20200825**; CN 202080059923 A 20200825; JP 2019215816 A 20191128; JP 2020032003 W 20200825; KR 20227009912 A 20200825; TW 109129344 A 20200827; US 202017637385 A 20200825